

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



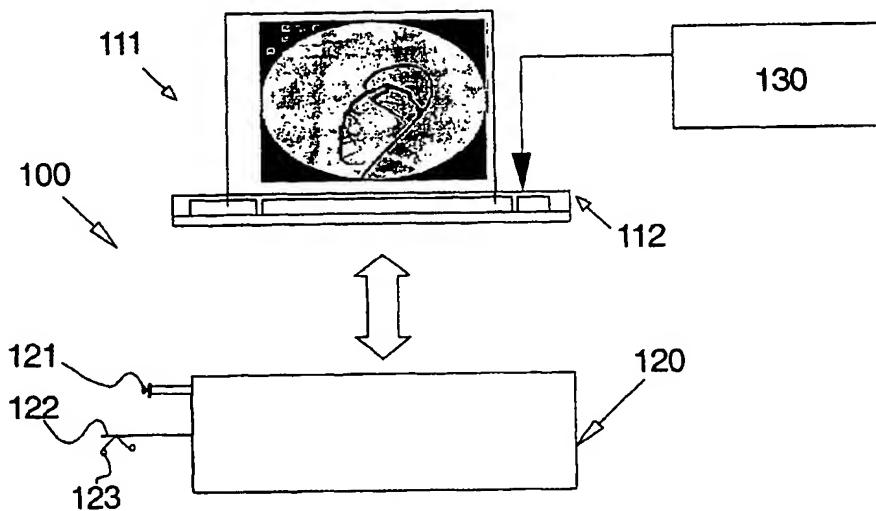
(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number
WO 2004/051604 A1

- (51) International Patent Classification⁷: **G09B 23/28**
- (21) International Application Number: **PCT/SE2003/001893**
- (22) International Filing Date: 3 December 2003 (03.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0203570-7 3 December 2002 (03.12.2002) SE
60/430,335 3 December 2002 (03.12.2002) US
- (71) Applicant (for all designated States except US): MENTICE AB [SE/SE]; Kaserntorget 6, S-411 18 Göteborg (SE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): GRUND-PEDERSEN, Jan [SE/SE]; Hagenvägen 1740, S-429 35 Kullavik (SE).
- (74) Agent: STRÖM & GULLIKSSON IP AB; Sjöporten 4, S-417 64 Göteborg (SE).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE, EG, ES, FI (utility model), FI, GB, GD, GR, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: AN INTERVENTIONAL SIMULATOR SYSTEM



WO 2004/051604 A1

(57) Abstract: The present invention relates to an interventional procedure simulation system and method, comprising a control unit and an interface unit, said control unit communicating with said interface unit to simulate handling of at least one instrument interfaced by said interface unit. The control unit comprises a database of vessels having hierarchy structure, each vessel having a diameter and a stiffness, and said instrument being a tool expandable in a simulated vessel. When the tool is expanded, a geometry of said vessel changes resulting in a fluid flow change.